

WHAT IS CLAIMED IS:

1. A method for limiting exposure of a substrate to potentially damaging radiation from a radiating apparatus, the method comprising the steps of:
compiling a database of information associated with the substrate,
identifying the substrate prior to processing the substrate on the radiating
apparatus,
5 accessing the database of information associated with the substrate, based on the
substrate identification, and
selectively modifying operation of the radiating apparatus based at least in part on
the information associated with the substrate.
2. The method of claim 1, wherein the step of compiling the database of information
comprises manually inputting the information into the radiating apparatus.
3. The method of claim 1, wherein the step of compiling the database of information
comprises automatically receiving and storing the information from prior
processing steps of the substrate and associating the information with the
substrate identification.
4. The method of claim 1, wherein the radiating apparatus is an inspection system.
5. The method of claim 1, wherein the substrate is a semiconducting integrated
circuit substrate.
6. The method of claim 1, wherein the potentially damaging radiation is ultraviolet
radiation from at least one of a mercury arc lamp and a laser.
7. The method of claim 1, wherein the step of selectively modifying the operation of
the radiating apparatus comprises at least one of reducing a peak power of the
radiating apparatus, increasing a scan speed of the radiating apparatus, increasing
a shuttering speed of the radiating apparatus, decreasing a shuttering speed of the
radiating apparatus, filtering the potentially damaging radiation, polarizing the
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potentially damaging radiation, and masking the radiating apparatus at scan reversal points.

8. A radiating apparatus for processing a substrate while limiting exposure of the substrate to potentially damaging radiation from the radiating apparatus, the radiating apparatus comprising:
 - a first input adapted to receive a substrate identification prior to processing the substrate,
 - a second input adapted to access a database of information associated with the substrate, based on the substrate identification, and
 - a processor adapted to selectively modify operation of the radiating apparatus based at least in part on the information associated with the substrate.
9. The apparatus of claim 8, wherein the database of information comprises information that is input manually into the radiating apparatus.
10. The apparatus of claim 8, wherein the database of information comprises information from prior processing steps of the substrate that is automatically received, stored, and associated with the substrate identification.
11. The apparatus of claim 8, wherein the radiating apparatus is an inspection system.
12. The apparatus of claim 8, wherein the substrate is a semiconducting integrated circuit substrate.
13. The apparatus of claim 8, wherein the potentially damaging radiation is ultraviolet radiation from at least one of a mercury arc lamp and a laser.
14. The apparatus of claim 8, wherein the selective modification of the operation of the radiating apparatus comprises at least one of reducing a peak power of the radiating apparatus, increasing a scan speed of the radiating apparatus, increasing a shuttering speed of the radiating apparatus, decreasing a shuttering speed of the radiating apparatus, filtering the potentially damaging radiation, polarizing the

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potentially damaging radiation, and masking the radiating apparatus at scan reversal points.

15. A software routine stored on a storage device that is readable by a computing device, the software routine adapted to control operation of the computing device, the software routine having modules for:
 - 5 receiving a substrate identification,
 - accessing a database of information associated with the substrate, based on the substrate identification,
 - receiving information associated with a radiating apparatus, and
 - presenting information useful to selectively modify operation of the radiating apparatus based at least in part on the information associated with the substrate, so as to limit potential damage to the substrate by the radiating apparatus.
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16. The software routine of claim 15, wherein the database of information is accessed from a remote server that automatically receives and stores the information from prior processing steps of the substrate and associates the information with the substrate identification.
17. The software routine of claim 15, wherein the radiating apparatus is an inspection system.
18. The software routine of claim 15, wherein the substrate is a semiconducting integrated circuit substrate.
19. The software routine of claim 15, wherein the potential damage to the substrate by the radiating apparatus is ultraviolet radiation from at least one of a mercury arc lamp and a laser.
20. The software routine of claim 15, wherein the selective modification of the operation of the radiating apparatus comprises at least one of reducing a peak power of the radiating apparatus, increasing a scan speed of the radiating apparatus, increasing a shuttering speed of the radiating apparatus, decreasing a

- 5 shuttering speed of the radiating apparatus, filtering potentially damaging radiation, polarizing the potentially damaging radiation, and masking the potentially damaging radiation at scan reversal points.